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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,891	08/28/2003	Tsuyoshi Kaneko	116565	7806

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OLIFF & BERRIDGE, PLC
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EXAMINER

STEVENSON, ANDRE C

ART UNIT	PAPER NUMBER
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2812

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,891

Applicant(s)

KANEKO ET AL.

Examiner

Andre' C. Stevenson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 24, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-16 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/30/06, 02.21.06</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Information Disclosure Statement

The information disclosure statement (IDS) submitted on February 21, 2006 and January 30, 2006 was filed before the final action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

Applicant's Arguments: The November 28 Amendment amended the claims to recite "forming an optical member on the top surface of the base member by curing the optical member precursor." The Office Action asserts that Takeo discloses forming an optical member on the top surface of a base member at col. 9, lines 4-20. However, Takeo at col. 9, lines 4-20 does not disclose or suggest such a feature.

Examiner's Answer: Applicant's arguments filed March 26, 2006 have been fully considered but they are not persuasive. The Examiner directs the applicant to Takeo, figures 1a-i, 2a-d, column #5, lines 15-24, column #6, lines 1 through 16 and column #9, lines 4-20, as cited in the previous rejection, where it is clearly shown that the a droplet is dispensed on a base member.

Applicant's Argument: As a preliminary matter, Applicants respectfully request that the next Office Action rejection, if any, be a non-final rejection. In particular, as discussed during the

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February 2, 2006, telephone interview, the outstanding Office Action is non-responsive to the November 28, 2005, Amendment. For example, the Office Action at page 3, line 4, responds to the limitation "curing the optical member precursor to form an optical member".

Examiner's Answer: Applicant's arguments filed March 26, 2006 have been fully considered but they are not persuasive. The Examiner informed Mr. Oliff in a February 2, 2006 telephone interview that a typographical error had occurred in the reciting of the claim language, but that it in no way changed or altered the rejection or the Examiner's decision that the prior art indeed taught the claimed language of the Applicant. For this reason, the Examiner takes the position that no interruption of the normal processing of the application has occurred, and the rejection is indeed proper, as Mr. Oliff was informed on February 2, 2006; thus, the present office action that is being issued will be a Final Action.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7, 8, 9, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeo (U.S. Pat. No.6,838,361 B2, Patented 01/04/05, PCT Filed 03/11/02).

Takeo shows, in figures 1-14 and corresponding text, with respect to claim #1, a method of manufacturing an optical component, comprising (**column 13, lines 54-67; column 14, lines 1-14**): forming a base member upon a substrate (**fig. 1d, item 12, 14, 16 & 30 & fig 3c, item 1,**

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12 & 14; column 5, lines 15-24; column 6, lines 1-10); ejecting a plurality of droplets on to the top surface of the base member to form an optical member precursor on the top surface of the base member and curing the optical member precursor to form an optical member (**column 9, lines 4-20; column 6, lines 11-16**). *Pertaining to Claim #2*, Takeo also shows a method of manufacturing an optical component, whereby the forming includes forming the base member with a material that transmits light of a prescribed wavelength (**column 10, lines 34-39; column 6, lines 22-33; column 15, lines 10-23**). Examiner notes that although Takeo fails to explicitly mention that the material is transmissive to light, he does teach the use of polyethylene and polystyrene, which are both transmissive to light. *Pertaining to claim #3*, Takeo shows, wherein the method of manufacturing an optical component includes the ejecting including ejecting using an inkjet method (**column 4, lines 4-16**). *Pertaining to claim 4*, Takeo shows, wherein the method of manufacturing an optical component, the curing including curing the optical member precursor by adding energy (**column 9, lines 4-20**). *Pertaining to claim #5*, Takeo shows method of manufacturing an optical component, the forming including forming the base member so that an acute angle is formed between the top surface of the base member and a side surface in the base member, which contacts the top surface (**column 5, lines 66-67; column 6, lines 1-10**). *Pertaining to claim #7*, Takeo shows, a method of manufacturing an optical component, further comprising adjusting the wettability of the top surface of the base member with respect to the droplet, before the ejecting (**column 5, lines 15-25**). *Pertaining to claim #8*, Takeo shows, the method of manufacturing an optical component, wherein the optical member is a micro lens, and the optical component is a micro lens substrate (**column 2, lines 50-53; column 1, lines 58-67; column 13, lines 54-67; column 10, lines 33-39; column 14, lines 37-49; column 15, lines**

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5-54). Examiner notes that Takeo fails to show explicitly the term “micro lens” when referring to the optical members, as described by the present application. However, Takeo shows that the substrate (**item 1**) can be made of glass (**column 2, lines 50-53**), and that the first material being formed on the substrate (**item 12**) is made of polystyrene or polyethylene (**column 10, lines 33-39**), both of which are transmittant to light. These factors, along with the fact that Takeo is teaching the manufacturing of an electro-optic or an electroluminescent device, leads the Examiner to take the position that the substrate (**item 2**) and the first material (**item 12**) are indeed micro lens. Also, Takeo teaches that the device may be part of a camera optics system (column 14, lines 37-49; column 15, lines 5-54). *Pertaining to claim #9*, Takeo shows, wherein a method of manufacturing an optical component, further comprising embedding the perimeter of the optical member using a sealing material (**column 11, lines 1-11**). *Pertaining to claim #12*, Takeo shows, the method of manufacturing a micro lens substrate, comprising: forming a base member upon a substrate (**fig. 1d, item 12, 14, 16 & 30 & fig 3c, item 1, 12 & 14; column 5, lines 15-24; column 6, lines 1-10**), ejecting a droplet on to the top surface of the base member to form a lens precursor (**column 6, lines 11-16**); and curing the lens precursor to form a lens (**column 9, lines 4-20**). Finally, *pertaining to claim #13*, Takeo shows, method of manufacturing a micro lens substrate according to claim 12, the forming including forming the base member with a material that transmits light of a prescribed wavelength (**column 10, lines 34-39**).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeo (U.S. Pat. No.6,838,361 B2, Patented 01/04/05, PCT Filed 03/11/02) as applied to claims 1-5 and 7-9 above, and in view of Banno et al. (U.S. Pat. No.6,761,925 B2, Patented 07/13/04, Filed 04/09/99).

Takeo shows, *Pertaining to claim #10*, wherein the method of manufacturing an optical component, comprising: forming a base member upon a substrate (**fig. 1d, item 12, 14, 16 & 30 & fig 3c, item 1, 12 & 14; column 5, lines 15-24; column 6, lines 1-10**), ejecting a droplet on to the top surface of the base member to form an optical member precursor (**column 6, lines 11-16**), curing the optical member precursor to form an optical member (**column 9, lines 4-20**). *Pertaining to claim #11*, Takeo shows, a method of manufacturing an optical component, the forming including forming the base member with a material that transmits light of a prescribed wavelength (**column 10, lines 34-39**).

Takeo fails to show, *pertaining to claim #10*, removing the optical member from the top surface of the base member.

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Banno teaches, *pertaining to claim #10*, in a similar manufacturing method, removing an optical member from the top surface of a base member (**column 13, lines 20-28**).

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to implement the art of removing the optical member from the top surface of the base member, in the method of Takeo, as taught by Banno, with the motivation that if an amount of droplet is placed in an unwanted position, or an excessive amount is deposited in an unwanted area, it can be removed without destroying the work of the chip that has already been accomplished.;

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim #6 allowable subject matter, pending further search.

- ✓ Forming including forming the upper part of the base member in an inverse tapered shape.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; Speakman (U.S. Pat. No. 6,402,403), Speakman (U.S. Pat. No. 6,713,389 B2), Banno et al. (U.S. Pat. No. 6,060,113).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' Stevenson whose telephone number is (571) 272 1683. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Lebentritt, can be reached on (571) 272 1873. The fax phone number for the organization where this application or proceeding is assigned is (703) 308 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956. Also, the proceeding numbers can be used to fax information through the Right Fax system;

(703) 872-9306

Andre' Stevenson

06/19/06


MICHAEL LEBENTRITT
SUPERVISORY PATENT EXAMINER